No, half of the adducts were lost in the first 6 hours. This was not repair, it was cell death. The initial calculation of the remaining loss gave a half-life of 94 hours. This came down to 63 hours when all samples were evaluated. I am attaching a slide of the data.

Jim

On 5/3/2012 3:26 PM, Ravi Subramaniam wrote:

> Thanks. Just to make sure I am interpreting correctly. The 63 hour half life (with n=5) was for the first part of the elimination? But with n=3 that half-life was 6 hours?
>
> Ravi.
> ---
> Ravi Subramaniam
> Environmental Health Scientist
> NCEA-Washington, ORD, EPA
> N-7922, Two Potomac Yard, Crystal City
> (703) 347-8606, (301) 515-2701 (alternate office)
> ---

Our 10 ppm study showed that half of the adducts were lost in the first 6 hours after a single 6 hr exposure, based on an n=3. We completed the analysis with n=5 and found that the half live was 63 hours. This (10 ppm) is a toxic exposure, so we have now completed the exposures in a 28-day rat study with sacrifices at 1, 2, 3 and 4 weeks of exposure to 2 ppm, 7 days/week, but have not gotten to the DNA adduct analyses,. This study also has a half-life study with -6 and -24 hours, 3 days and 7 days post exposure. It should provide definitive information on the adduct half-life under non-cytotoxic conditions. I have a new postdoc starting in mid August, who will work on this study. I forwarded your earlier questions to Tom Starr, so that I also get his input. He only used the 94 hour data in the Tox Sci paper. I hope this helps clarify things.

Jim

On 5/3/2012 2:04 PM, Ravi Subramaniam wrote:
Hi Jim:

Sorry to have these questions trickling in. . .
Lu (unpublished) indicated a biphasic decay curve for the adduct--a rapid loss followed by a slow process corresponding to a half-life of 94 hours. (Swenberg et al. 2011, pg S134). However in calculating steady state concentrations, only the slow process appears to be included (pg S135, second column).

Ravi.

Ravi Subramaniam
Environmental Health Scientist
NCEA-Washington, ORD, EPA
N-7922, Two Potomac Yard, Crystal City
(703) 347-8606, (301) 515-2701 (alternate office)